

Generating a restart file for an ...

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Sep 20, 2007 When a LIS run uses multiple ensemble members per model tile (e.g. for data assimilation applications using the Ensemble kalman filter), the simulation requires a modified restart file than the one obtained using a single ensemble member per tile. There are two options to initialize an ensemble run.

1) Conduct a model spinup using an ensemble structure - This option can unnecessarily add significant computational overhead, if infact the purpose of the spinup (with ensembles) is simply to generate a restart file.

2) Use the LIS utility (under src/utls/ensemble) to a generate a restart file to initialize an ensemble run.

Once the utility is compiled, it can be used as follows:

Usage:

```
restartForEnsemble lsm input_file output_file nfields nens
```

Usage example:

```
restartForEnsemble 1 noah.rst noah12.rst 18 12
```

where 18 is the number

of fields and 12 is the number of ensembles.

Hint: nfields =18 for noah, 102 for CLM2, 25 for CLSM, 8 for Mosaic

Tags: lis, enkf, ensemble, restart